CHAPTER 1: SPECIFICATION

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1. SPECIFICATIONS

SC3500 Hardware Specifications

Item	
Interface UnitType	External box
Dimensions (W x D x H)	200 x 233 x 80(mm) [Horizontaly set] 7.87 x 9.17 x 3.15(inch) [Horizontaly set]
Power Requirements	100 to 240VAC, 50/60Hz
Power Consumption	20W
OperationTemperature	41F to 104F(5C to 40C)
Operation Humidity	40% to 70%(No dew condensation)
Weight	Approx. 4.4lb (2.0kg)
Resolution	Input: 400 dpi/ Output: 400dpi
Input Interface	IEEE 1284 Compatible Mac SERIAL
Control Button	START, STOP and FUNCTION (3 buttons)
Indicator(LED)	READY/DATA, PAGE STANDBY and ERROR (3 LEDs)
Rear Panel Connectors	Host (PARALELL), Host (SERIAL), Printer (RISOGRAPH)
Margin Assignment	Top/bottom and left/right : 3mm(0.118 inch) or greater [Depends on Model of Risograph]
Paper Size Range	Max. 297 x 432mm or 11.693 x 17.008 inch Min. 10 x 10mm or 0.394 x 0.394 inch (The paper sizes which are available for printing vary with the model of Risograph.)

SC3500 Interface Specifications

A. Host (SERIAL) connector

- CN3 : MAC (SERIAL)

Mac printer cable system : 57.6K bps
LocalTalk cable system : 230.4K bps

- Input/output specifications

Input : RS-422 receiver or equivalent
Output : RS-422 driver or equivalent

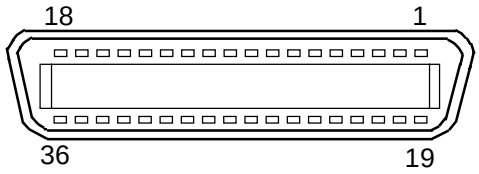
- Pin configuration

(No link file)

NOTE : Timing and other details are not published.

B. Host (PARALLEL) connector

- Pin configuration



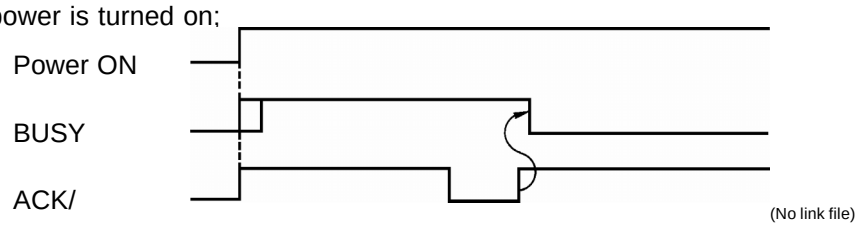
- Interface signals(Centronics interface specifications)

Pin No.	Signal	Source	Function
1	DATASTROBE/	H	Data read synchronizing signal. When this signal is LOW, the SC3500 takes in data.
2	DATA1	Bi-Di	Represents data bit 1.
3	DATA2	Bi-Di	Represents data bit 2.
4	DATA3	Bi-Di	Represents data bit 3.
5	DATA4	Bi-Di	Represents data bit 4.
6	DATA5	Bi-Di	Represents data bit 5.
7	DATA6	Bi-Di	Represents data bit 6.
8	DATA7	Bi-Di	Represents data bit 7.
9	DATA8	Bi-Di	Represents data bit 8.
10	ACK/	P	Indicates that all data have been acknowledged when LOW.
11	BUSY	P	Indicates that the SC3500 is busy and cannot receive data when HIGH.
12	PE	P	Indicates the absence of paper in the printer when HIGH.
13	SELECT	P	Indicates whether the SC3500 is selected or not.
14	AF	H	Reserved for future expansion.
15	NC*		Underfined or reserved for future expansion.
16	GND		Signal ground
17	FG		Frame ground
18	5V	P	+5V power supplied from the SC3500 through a 4.2k½ resistor.
19	GND		nStrobe signal ground
20	GND		Data 1 signal ground
21	GND		Data 2 signal ground
22	GND		Data 3 signal ground
23	GND		Data 4 signal ground
24	GND		Data 5 signal ground
25	GND		Data 6 signal ground
26	GND		Data 7 signal ground
27	GND		Data 8 signal ground
28	GND		nAck signal ground
29	GND		Busy signal ground
30	GND		pError signal ground
31	INPUT PRIME/	H	Restores the SC3500 into the initial status (compatibility mode) when HIGH.
32	FAULT/	P	Notifies the presence or absence of an error in the SC3500 to the external device(host).
33	NC*		Underfined or reserved for future expansion.
34	NC*		Underfined or reserved for future expansion.
35	NC*		Underfined or reserved for future expansion.
36	SELECT IN/	H	Used by the external device (host) to select the SC3500. When this signal is LOW, the SC3500 is selected.

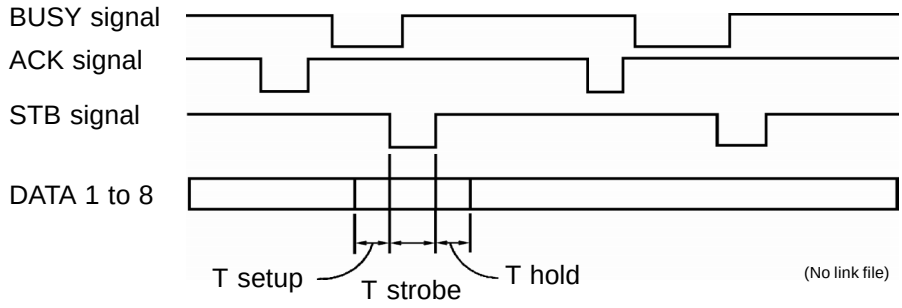
NC* stands for no connection
H stands for Host and P means the SC3500

-Timing Charts

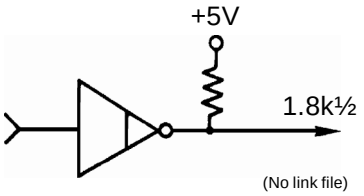
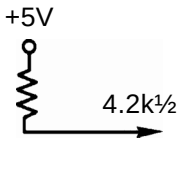
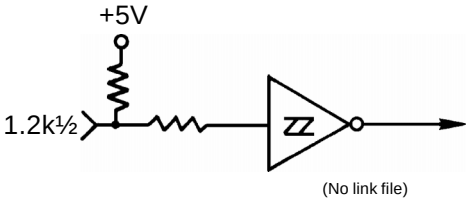
When the power is turned on;



When data is received;

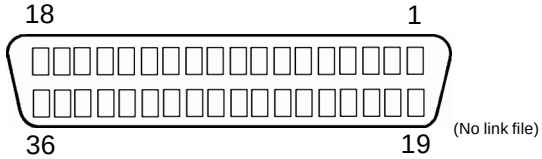


- Electrical Characteristics

Signal	Circuit	Remarks
nAck **Busy** **pError** **Select** **nFault**		-Open collector LS06 or equivalent -IEEE 1284 level 1 or equivalent
Peripheral Logic Hight		Connected to the +5V source within the SC3500 through a 4.2k½ resistor
nStrobe **Data 1 to 8** **nInt** **nAutoFd** **nSelection**		-Schmidt buffer LS14 or equivalent -IEEE 1284 level 1 or equivalent(input capacity varies)

C. Printer(RISOGRAPH)connector

- Pin configuration



NOTE : This interface is dedicated to the RISOGRAPH printer.

2. Comparison Chart

SPECIFICATION		SC3500	SC3000
Compatibility	PC	Standard	Standard
	Macintosh(*1)	Standard	Standard
Microprocessor/speed		AM29202(20.2MHz)	AMD29205(13.3MHz)
Memory:	Standard RAM	8MB	4MB
	Maximum RAM	40MB(*2)	20MB
I/O ports:	Standard	IEEE1284 Parallel	IEEE1284 Parallel
		LocalTalk	LocalTalk
		RS422	RS422
Port Autoswitching		Yes	Yes
Language		RisoRinc	RisoRinc
Emulation Printers		No	No
Resident fonts		No	No
Functions		Print	Print
Computer set copy count		Yes	Yes
Computer set printer's function		Yes	Yes
180 degree rotate image		Yes	No
Printer Resolution	300x300dpi	Yes	Yes
	300x400dpi	Yes	No(*3)
	400x400dpi	Yes	Yes
	600x600dpi	Yes(*4)	Yes(*5)
Software:Print Drivers	Win3.1	Yes	Yes
	Win95	Yes	Yes
	WinNT4.0	Yes	No
	Mac QD	Yes	Yes
Paper Editor		Yes	Yes

Above specifications may change without notice

(*1) System 7.1 or 7.x only (No System 8 supported)
(*2) When installed 32MB optional RAM which only available for SC3500
(*3) The Problem (Image shrinkage) will be occured
(*4) We may need to install the optional RAM depends on the file
(*5) We must install 16MB optional RAM to print by 600dpi Risograph

3. Applicable Risograph Model

SC3500 can be connect with the Risograph listed below.

Risograph		Risograph Rom version		Other condition
		Panel ROM newer than	System ROM newer than	
RG2500	Not Compatible			
RG2700	Not Compatible			
RG3500	Not Compatible			
RC4000	Not Compatible			
RC4500	Not Compatible			
RC5600	Not Compatible			
RC5600D	Not Compatible			
RC5800	Not Compatible			
RC6300	Not Compatible			
RA4050	Compatible		RA49/V2.00	Interface kit III or IIIS must be installed.
RA4200	Compatible		RA49/V2.00	
RA4300	Compatible		RA59/V1.03	
RA4900	Compatible		RA49/V2.00	
RA5900	Compatible		RA59/V1.03	
GR1700	Compatible		RL/V1.00	Interface kit III or IIIS must be installed.
GR1750	Compatible		RL/V1.00	
GR2700	Compatible		RS/V1.00C	
GR2710	Compatible		RL/V1.00	
GR2750	Compatible	RP/V1.00	RM/V1.00	
GR3710	Compatible	RP/V4.01	RM/V7.00C	
GR3750	Compatible	RP/V1.00	RM/V1.00	
GR3770	Compatible	RP/V.4.01	RH/V.1.09	Interface kit III or IIIS must be installed.
TR1510	Compatible		SS/V1.00	Option PCB must be installed.
TR1530	Compatible		SS/V1.00	